

**Appln No. 09/618,965**  
**Amdt date September 28, 2004**  
**Reply to Office action of June 29, 2004**

**REMARKS/ARGUMENTS**

Claims 1-80 and 83-84 are pending in this application. Claims 1, 24, 42-44, 67, and 83-84 are amended.

Claims 1-80 and 83-84 are rejected under 35 U.S.C. 103(a) as being unpatentable over You (U.S. Patent 6,158,045) in view of Cardoza et al. (U.S. Patent 5,630,049). In view of the above amendments and following remarks, Applicants respectfully submit that the application is in condition for allowance, therefore, reconsideration and allowance of the application are respectfully requested.

Independent claims 1, 42, 44, and 83 include, among other limitations, "a shared memory in which separate portions of the shared memory are assigned to a plurality of executing services and a debug construct, respectively," "selecting a target construct from the plurality of executing services for debugging," and "accessing data in the shared memory related to an operation of the target construct by the debug construct in real time." Applicants respectfully submit that the cited references, alone or in combination, do not disclose or suggest the above-recited limitations.

Rather, You discloses "shared libraries which contain code that can be used across address spaces, and other services specific to that particular instance of program execution." (Col. 8, lines 13-16.). However, these "shared libraries" are not the same as the claimed "shared memory in which separate portions of the shared memory are assigned to a plurality of executing services and a debug construct." Furthermore, You describes "Communication between client and server are handled

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using TPrimitiveConnection objects. . . . Subclass implementations of TPrimitiveConnection can be implemented using Unix sockets, Unix pipes Windows winsock sockets, Mach ports, shared memory, or any other byte- or block-oriented communication mechanism." Likewise, this subclass implementation of objects for communication between client and server, using shared memory is not the same as the claimed "shared memory in which separate portions of the shared memory are assigned to a plurality of executing services and a debug construct," and "accessing data in the shared memory related to an operation of the target construct by the debug construct in real time."

Similarly, Cardoza discloses a target computer system that may operate in one of two modes, polling mode, or interrupt-driven mode. Cardoza talks about the host memory and target memory, however, the debugging system of Cardoza does not include a "shared memory in which separate portions of the shared memory are assigned to a plurality of executing services and a debug construct."

Additionally, the independent claims 1, 42, 44, and 83 include, among other limitations, "monitoring at least a portion of the accessed data without disturbing the operation of the target construct." The Examiner accurately states that You does not disclose this limitation. (Office action, page 4, second paragraph.) Applicants respectfully disagree with the Office action that "Cardoza explicitly teaches "status information on portion of the target operating system code or data without

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disturbing the operation [col. 5, lines 3-60]." (Office action, page 4, last paragraph, emphasis added.)

Cardoza, in the cited text explains that "Each message contains a request that the target computer system perform a task in accordance with the translated user input." (Col. 5, lines 8-10). "The message is forwarded to the network communications library 50 for unpackaging and then to a portion of the target operating system code 49. The target computer system 12 performs the functions indicated by the series of messages and reports results or status information back to the host computer system in the form of one or more messages. Specifically, a portion of the target operating system code comprises the software needed to perform remote debugging." (Id., lines 28-36, emphasis added.).

Thus, as explained above by Cardoza, the target actually performs the functions indicated by the message transmitted from the remote debugger. Therefore, the remote debugger of Cardoza does in fact disturb the "operation of the target construct."

Consequently, independent claims 1, 42, and 83 are patentable over You and Cardoza. Applicants further submit that dependent claims 2-23 and 45-66 that depend directly or indirectly from claims 1 and 44, respectively are allowable as are claims 1 and 44, and for additional limitations recited therein.

Independent claims 24, 43, 67, and 84 include, among other limitations, "shared memory in which separate portions of the shared memory are assigned to a plurality of executing services and a debug construct."

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For the same reasons discussed above, Applicants respectfully submit that the cited references, alone or in combination do not disclose or suggest the above-recited limitation.

Applicants therefore respectfully submit that claims 24, 43, 67, and 84 are novel and unobvious over the cited references and are therefore allowable. Applicants further submit that claims 25-41 and 68-80 that depend directly or indirectly from claims 24 and 67, respectively are allowable as are claims 24 and 67, and for additional limitations recited therein.

In view of the foregoing amendments and remarks, it is respectfully submitted that this application is now in condition for allowance, and accordingly, reconsideration and allowance are respectfully requested.

Respectfully submitted,  
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CLV PAS586290.1--09/28/04 12:13 PM